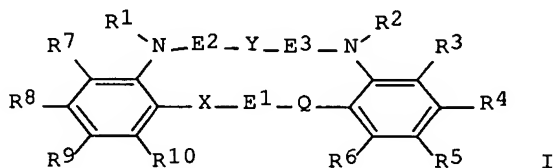


L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 2002:978838 CAPLUS
 DN 138:74702
 TI Metal-chelating crown ether derivatives with an attached dye, reactive group or conjugated substance, their production and their use
 IN Martin, Vladimir V.; Gee, Kyle R.; Haugland, Richard P.; Diwu, Zhenjun
 PA Molecular Probes Inc, USA
 SO Brit. UK Pat. Appl., 95 pp.
 CODEN: BAXXDU
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	GB 2372749	A1	20020904	GB 2001-30408	20011220
	GB 2372749	B2	20030730		
	US 2002164616	A1	20021107	US 2001-26302	20011219
PRAI	US 2000-258266P	P	20001220		
OS	MARPAT 138:74702				
GI					



AB Crown ether dyes (I; E1, E2, E3 = org. connecting group; Q, X = O, S, optionally alkylated imino; R1, R2 = H, org. group; R3-R7 = H, halogen, azido, nitro, nitroso, amino, cyano, org. group; Y = O, S, optionally substituted imino) are obtained for use as fluorescent indicators with biomols. In an example, a diazatrioxadibenzo crown ether deriv. with an appended hydroxydifluoroxanthene ring was prepd. which showed good intracellular fluorescence.

IT **481667-71-4P**

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture);
 TEM (Technical or engineered material use); BIOL (Biological study); PREP
 (Preparation); USES (Uses)

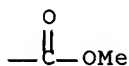
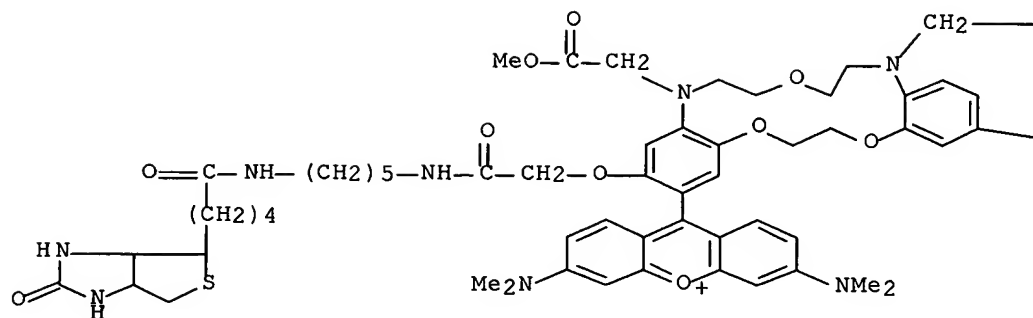
(fluorescent indicator; prodn. of crown ether derivs. for use as fluorescent indicators with biomols.)

RN 481667-71-4 CAPLUS

CN Xanthylium, 3,6-bis(dimethylamino)-9-[3-[2-[[5-[[5-(hexahydro-2-oxo-1H-thieno[3,4-d]imidazol-4-yl)-1-oxopentyl]amino]pentyl]amino]-2-oxoethoxy]-

6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-

dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]- (9CI) (CA INDEX NAME)



IT 481666-91-5P 481666-93-7P 481667-03-2P
 481667-17-8P 481667-26-9P 481667-44-1P
 481667-51-0P 481667-55-4P 481667-58-7P
 481681-93-0P

RL: IMF (Industrial manufacture); RCT (Reactant); TEM (Technical or engineered material use); PREP (Preparation); RACT (Reactant or reagent);

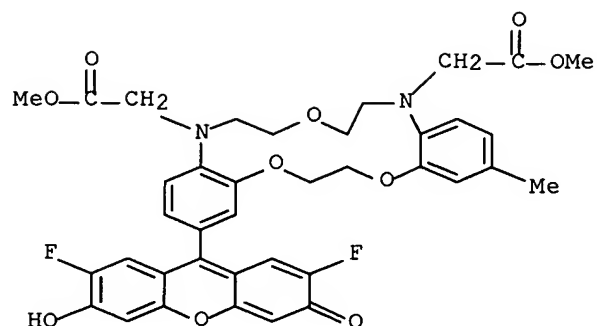
USES (Uses)

(fluorescent indicator; prodn. of crown ether derivs. for use as fluorescent indicators with biomols.)

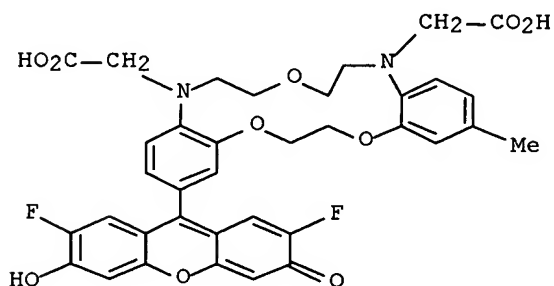
RN 481666-91-5 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

acid, 2-(2,7-difluoro-6-hydroxy-3-oxo-3H-xanthen-9-yl)-6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)

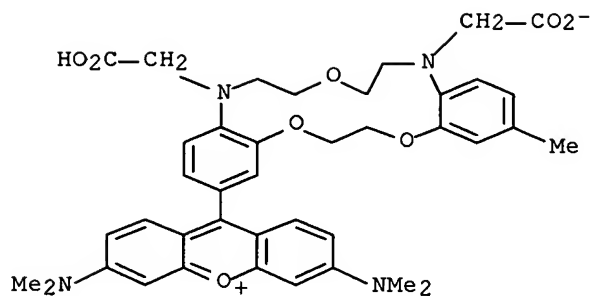


RN 481666-93-7 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic acid, 2-(2,7-difluoro-6-hydroxy-3-oxo-3H-xanthen-9-yl)-6,7,9,10,17,18-hexahydro-14-methyl-, dipotassium salt (9CI) (CA INDEX NAME)



● 2 K

RN 481667-03-2 CAPLUS
 CN Xanthylum, 9-[5,11-bis(carboxymethyl)-6,7,10,11,17,18-hexahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)-, inner salt, potassium salt (9CI) (CA INDEX NAME)

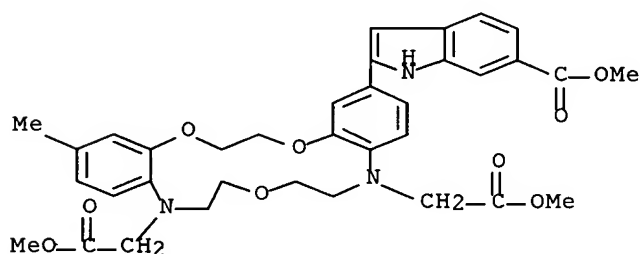


● K

RN 481667-17-8 CAPLUS

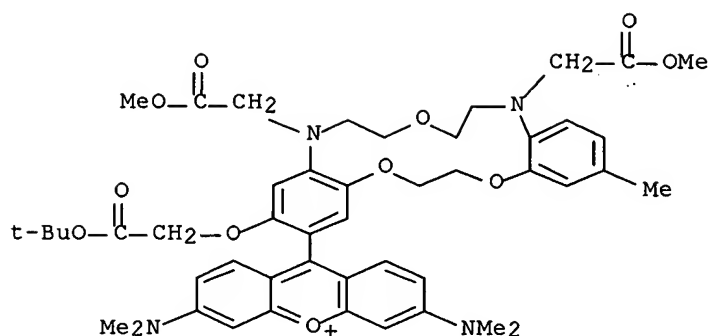
CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

acid, 6,7,9,10,17,18-hexahydro-2-[6-(methoxycarbonyl)-1H-indol-2-yl]-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



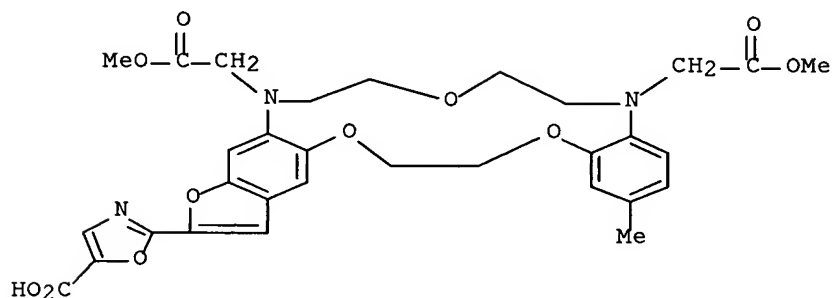
RN 481667-26-9 CAPLUS

CN Xanthylium, 3,6-bis(dimethylamino)-9-[3-[2-(1,1-dimethylethoxy)-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-, chloride (9CI) (CA INDEX NAME)

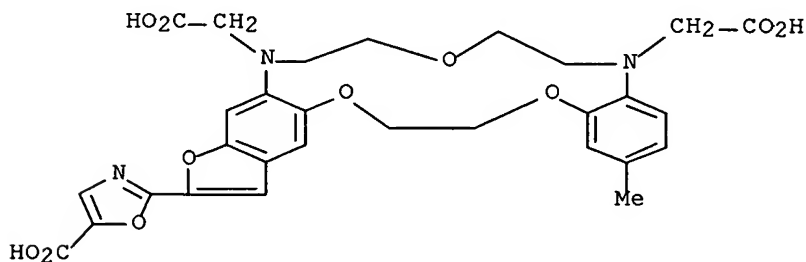


● Cl⁻

RN 481667-44-1 CAPLUS
 CN 5H,11H-Benzo[e]furo[2,3-p][1,4,10,7,13]benzotrioxadiazacyclopentadecine-5,11-diacetic acid, 14-(5-carboxy-2-oxazolyl)-6,7,9,10,18,19-hexahydro-2-methyl-, .alpha.,.alpha.'-dimethyl ester (9CI) (CA INDEX NAME)

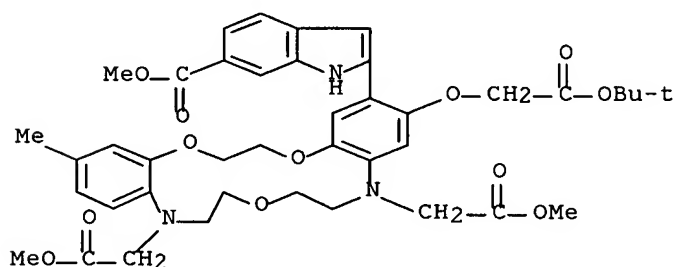


RN 481667-51-0 CAPLUS
 CN 5H,11H-Benzo[e]furo[2,3-p][1,4,10,7,13]benzotrioxadiazacyclopentadecine-5,11-diacetic acid, 14-(5-carboxy-2-oxazolyl)-6,7,9,10,18,19-hexahydro-2-methyl-, tripotassium salt (9CI) (CA INDEX NAME)

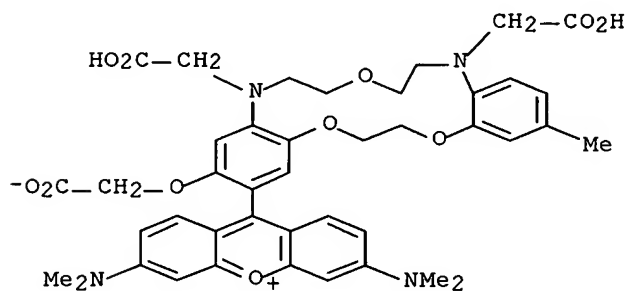


● 3 K

RN 481667-55-4 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
 diacetic
 acid, 3-[2-(1,1-dimethylethoxy)-2-oxoethoxy]-6,7,9,10,17,18-hexahydro-2-
 [6-
 (methoxycarbonyl)-1H-indol-2-yl]-14-methyl-, dimethyl ester (9CI) (CA
 INDEX NAME)



RN 481667-58-7 CAPLUS
 CN Xanthylum, 9-[3-(carboxymethoxy)-5,11-bis(carboxymethyl)-
 6,7,10,11,17,18-
 hexahydro-14-methyl-5H,9H-
 dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentade
 cin-2-yl]-3,6-bis(dimethylamino)-, inner salt, dipotassium salt (9CI)
 (CA
 INDEX NAME)

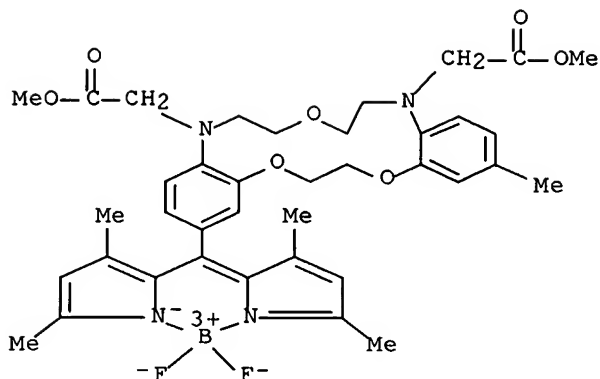


● 2 K

RN 481681-93-0 CAPLUS
 CN Borate(1-), [dimethyl 3-(carboxymethoxy)-2-[(3,5-dimethyl-1H-pyrrol-2-
 yl-
 .kappa.N)(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-6,7,17,18-
 tetrahydro-14-methyl-5H,9H-
 dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentad
 ecine-5,11(10H)-diacetato(2-)]difluoro-, hydrogen, (T-4)- (9CI) (CA
 INDEX
 NAME)



pyrrol-2-ylidene-.kappa.N)methyl]-6,7,17,18-tetrahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11(10H)-diacetato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)



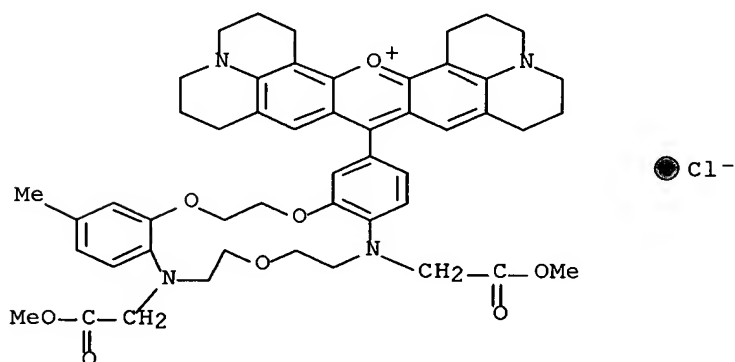
IT 481667-08-7 481667-12-3 481667-69-0

481667-70-3

RL: TEM (Technical or engineered material use); USES (Uses)
(fluorescent indicator; prodn. of crown ether derivs. for use as
fluorescent indicators with biomols.)

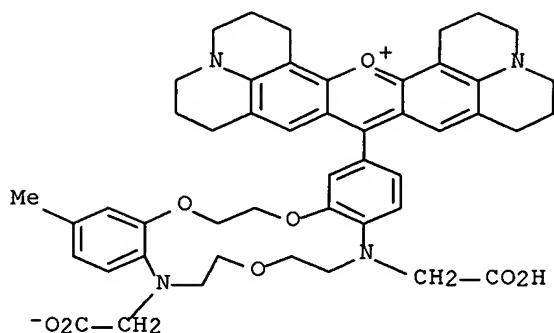
RN 481667-08-7 CAPLUS

CN 1H,5H,11H,15H-Xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium,
9-[6,7,9,10,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-
5H,11H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-
2,3,6,7,12,13,16,17-octahydro-, chloride (9CI) (CA INDEX NAME)



RN 481667-12-3 CAPLUS

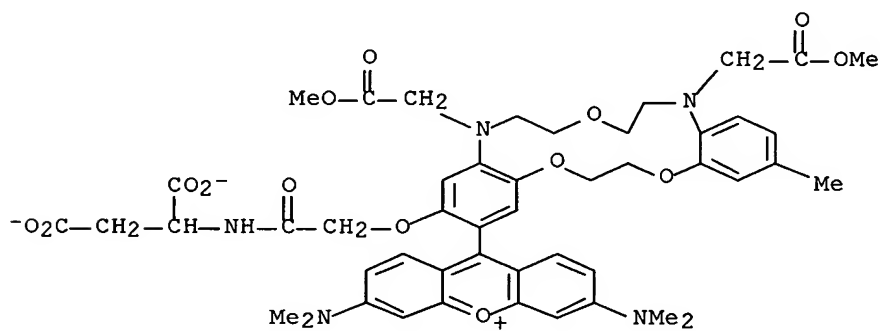
CN 1H,5H,11H,15H-Xantheno[2,3,4-ij:5,6,7-i'j']diquinolizin-18-ium,
9-[5,11-bis(carboxymethyl)-6,7,10,11,17,18-hexahydro-14-methyl-5H,9H-
dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-
2,3,6,7,12,13,16,17-octahydro-, inner salt, potassium salt (9CI) (CA
INDEX NAME)



● K

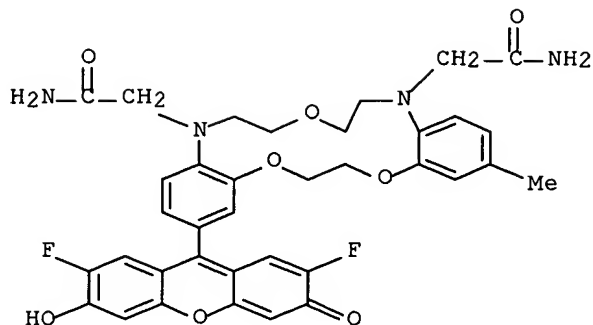
RN 481667-69-0 CAPLUS

CN Xanthylum, 9-[3-[2-[(1,2-dicarboxyethyl)amino]-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)-, bis(inner salt) (9CI) (CA INDEX NAME)



RN 481667-70-3 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetamide, 2-(2,7-difluoro-6-hydroxy-3-oxo-3H-xanthen-9-yl)-6,7,9,10,17,18-hexahydro-14-methyl- (9CI) (CA INDEX NAME)



IT 481666-68-6P 481666-70-0P 481666-72-2P
 481666-74-4P 481666-78-8P 481666-80-2P
 481666-82-4P 481666-84-6P 481666-85-7P
 481666-87-9P 481666-89-1P 481666-99-3P
 481667-01-0P 481667-15-6P 481667-20-3P
 481667-25-8P 481667-27-0P 481667-30-5P
 481667-32-7P 481667-33-8P 481667-38-3P
 481667-49-6P 481667-54-3P 481667-56-5P
 481667-60-1P 481667-61-2P 481667-62-3P
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 481681-92-9P

RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation);

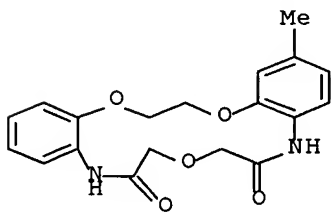
RACT

(Reactant or reagent)

(intermediate; prodn. of crown ether derivs. for use as fluorescent indicators with biomols.)

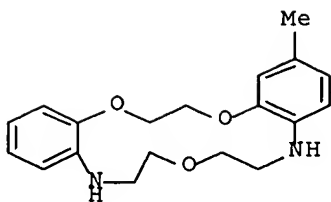
RN 481666-68-6 CAPLUS

CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-6,10(7H,11H)-dione, 17,18-dihydro-2-methyl- (9CI) (CA INDEX NAME)



RN 481666-70-0 CAPLUS

CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine, 6,7,10,11,17,18-hexahydro-2-methyl- (9CI) (CA INDEX NAME)



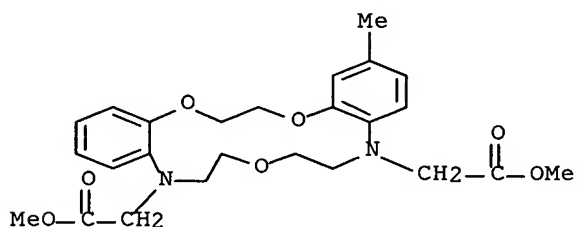
RN 481666-72-2 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

acid, 6,7,9,10,17,18-hexahydro-2-methyl-, dimethyl ester (9CI) (CA

INDEX

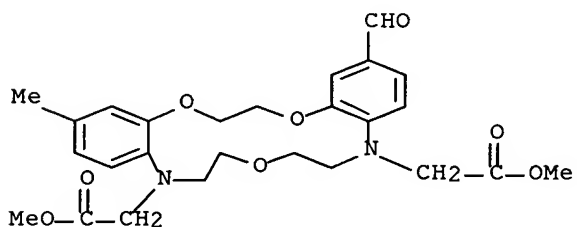
NAME)



RN 481666-74-4 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

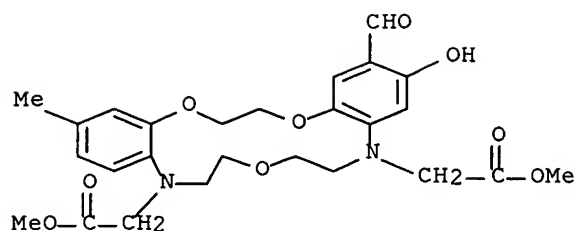
acid, 2-formyl-6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI)
(CA INDEX NAME)



RN 481666-78-8 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

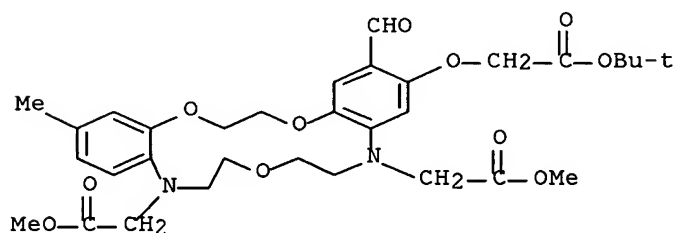
acid, 2-formyl-6,7,9,10,17,18-hexahydro-3-hydroxy-14-methyl-, dimethyl
ester (9CI) (CA INDEX NAME)



RN 481666-80-2 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

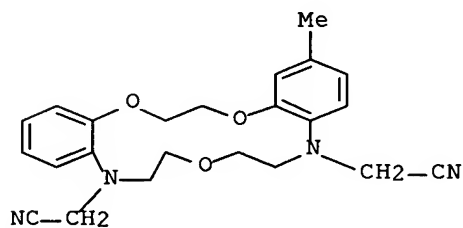
acid, 3-[2-(1,1-dimethylethoxy)-2-oxoethoxy]-2-formyl-6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 481666-82-4 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-

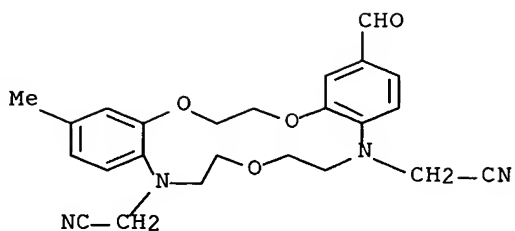
diacetonitrile, 6,7,9,10,17,18-hexahydro-2-methyl- (9CI) (CA INDEX NAME)



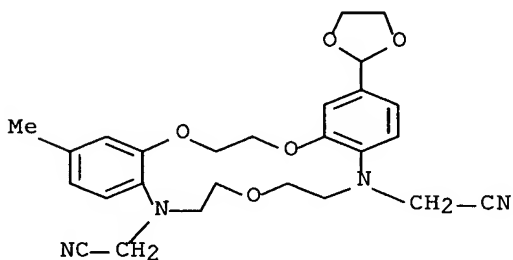
RN 481666-84-6 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-

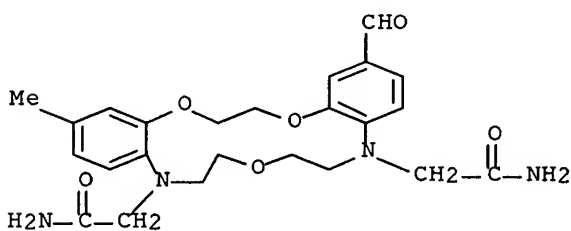
diacetonitrile, 2-formyl-6,7,9,10,17,18-hexahydro-14-methyl- (9CI) (CA INDEX NAME)



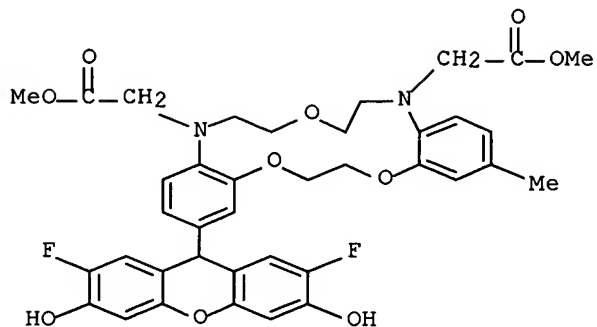
RN 481666-85-7 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
 diacetonitrile, 2-(1,3-dioxolan-2-yl)-6,7,9,10,17,18-hexahydro-14-
 methyl-
 (9CI) (CA INDEX NAME)



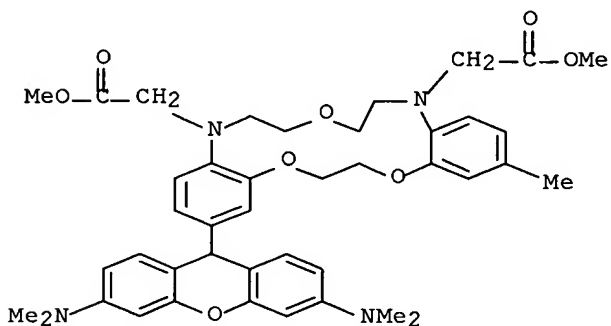
RN 481666-87-9 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
 diacetamide, 2-formyl-6,7,9,10,17,18-hexahydro-14-methyl- (9CI) (CA
 INDEX
 NAME)



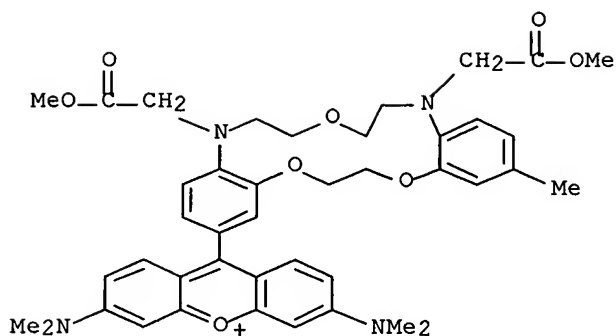
RN 481666-89-1 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
 diacetic
 acid, 2-(2,7-difluoro-3,6-dihydroxy-9H-xanthen-9-yl)-6,7,9,10,17,18-
 hexahydro-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 481666-99-3 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic acid, 2-[3,6-bis(dimethylamino)-9H-xanthen-9-yl]-6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 481667-01-0 CAPLUS
 CN Xanthylium, 3,6-bis(dimethylamino)-9-[6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-, chloride (9CI) (CA INDEX NAME)

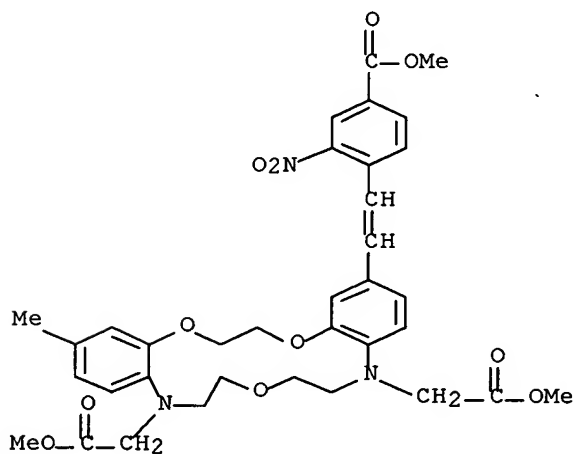


● Cl⁻

RN 481667-15-6 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

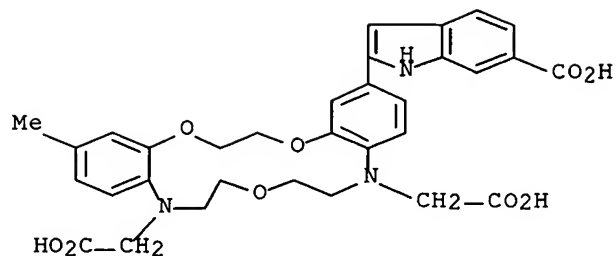
acid, 6,7,9,10,17,18-hexahydro-2-[2-[4-(methoxycarbonyl)-2-nitrophenyl]ethenyl]-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 481667-20-3 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

acid, 2-(6-carboxy-1H-indol-2-yl)-6,7,9,10,17,18-hexahydro-14-methyl- (9CI) (CA INDEX NAME)

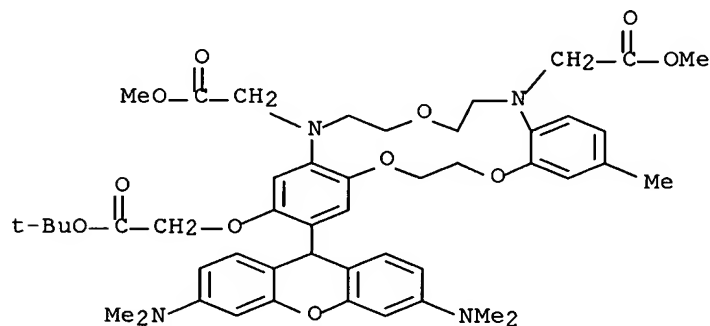


RN 481667-25-8 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

acid, 2-[3,6-bis(dimethylamino)-9H-xanthene-9-yl]-3-[2-(1,1-dimethylethoxy)-

2-oxoethoxy]-6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI)
(CA INDEX NAME)

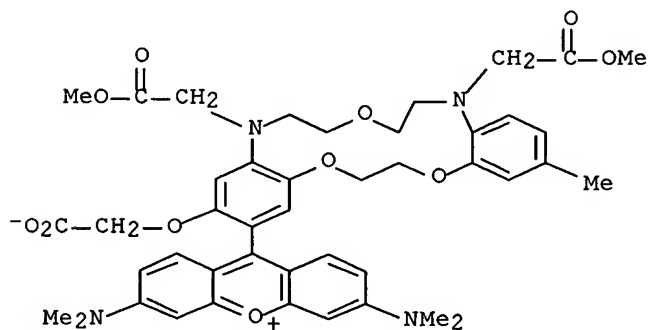


RN 481667-27-0 CAPLUS

CN Xanthylium, 9-[3-(carboxymethoxy)-6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-

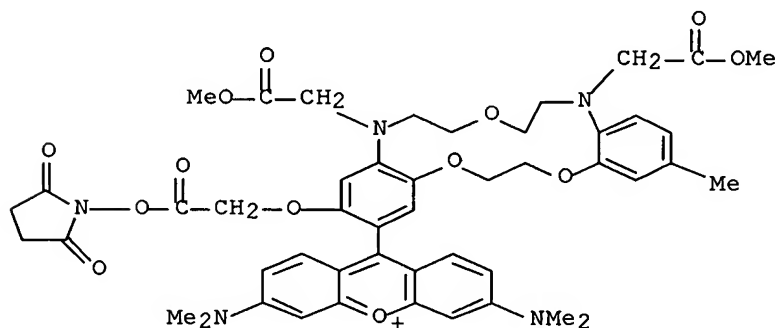
dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-2-yl]-3,6-bis(dimethylamino)-, inner salt (9CI)

(CA INDEX NAME)



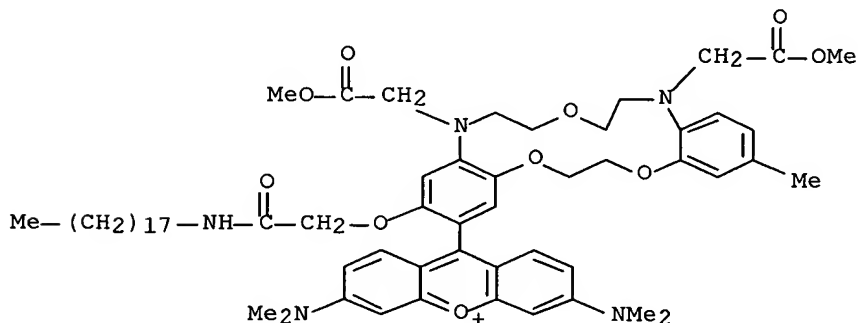
RN 481667-30-5 CAPLUS

CN Xanthylium, 3,6-bis(dimethylamino)-9-[3-[2-[(2,5-dioxo-1-pyrrolidinyl)oxy]-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]- (9CI) (CA INDEX NAME)



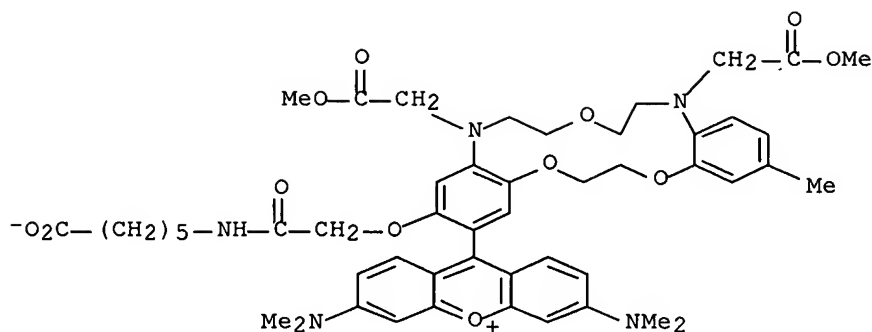
RN 481667-32-7 CAPLUS

CN Xanthylium, 3,6-bis(dimethylamino)-9-[6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-3-[2-(octadecylamino)-2-oxoethoxy]-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]- (9CI) (CA INDEX NAME)



RN 481667-33-8 CAPLUS

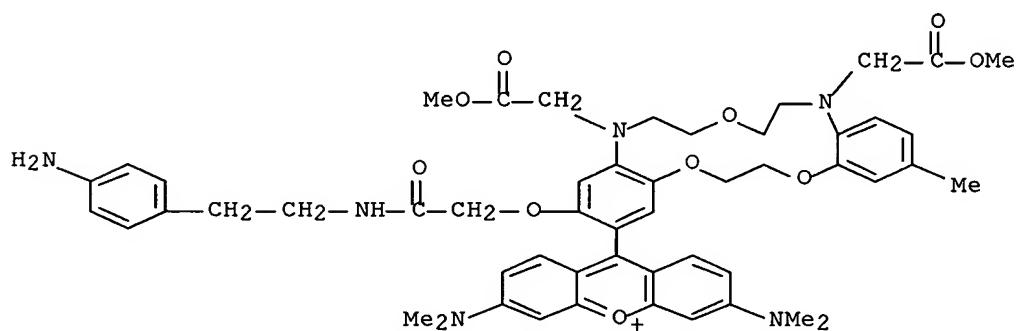
CN Xanthylium, 9-[3-[2-[(5-carboxypentyl)amino]-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)



RN 481667-38-3 CAPLUS

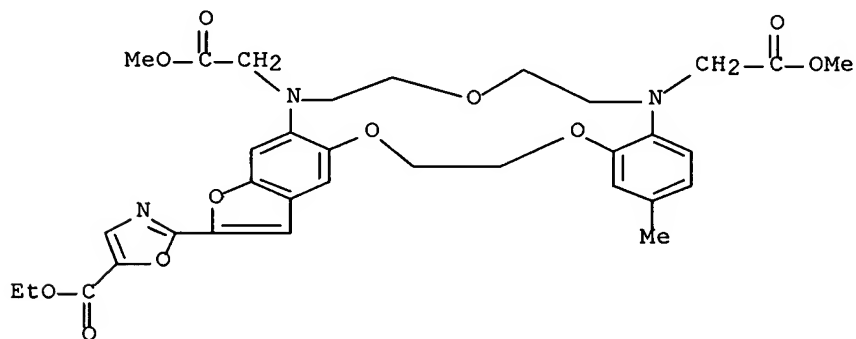
CN Xanthylum, 9-[3-[2-[[2-(4-aminophenyl)ethyl]amino]-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-

dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)- (9CI) (CA INDEX NAME)



RN 481667-49-6 CAPLUS

CN 5H,11H-Benzo[e]furo[2,3-p][1,4,10,7,13]benzotrioxadiazacyclopentadecine-5,11-diacetic acid, 14-[5-(ethoxycarbonyl)-2-oxazolyl]-6,7,9,10,18,19-hexahydro-2-methyl-, dimethyl ester (9CI) (CA INDEX NAME)

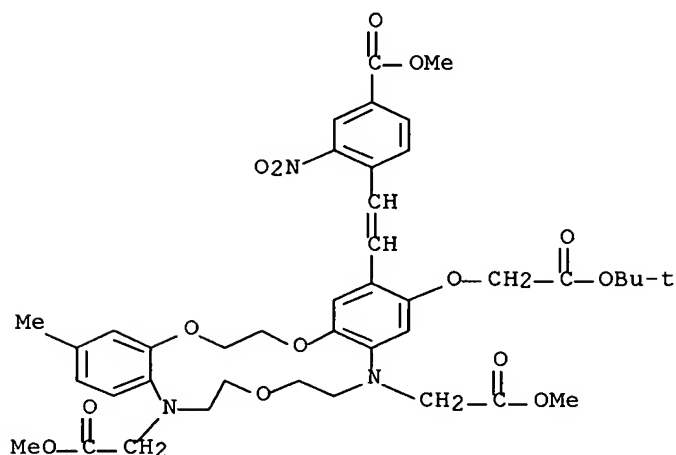


RN 481667-54-3 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-

diacetic

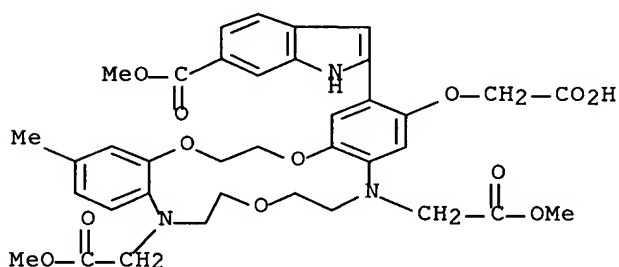
acid, 3-[2-(1,1-dimethylethoxy)-2-oxoethoxy]-6,7,9,10,17,18-hexahydro-2-[2-(4-(methoxycarbonyl)-2-nitrophenyl)ethenyl]-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 481667-56-5 CAPLUS

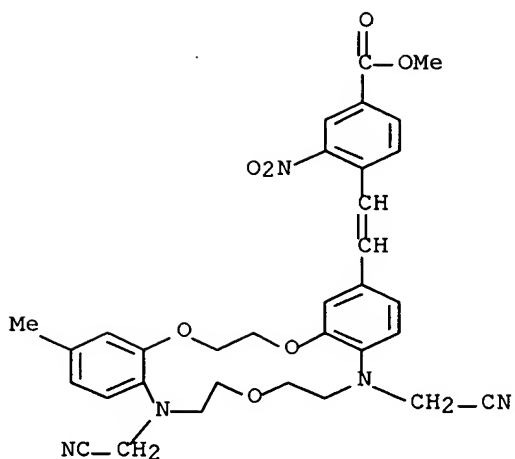
CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic

acid, 3-(carboxymethoxy)-6,7,9,10,17,18-hexahydro-2-[6-(methoxycarbonyl)-1H-indol-2-yl]-14-methyl-, .alpha.,.alpha.'-dimethyl ester (9CI) (CA INDEX NAME)



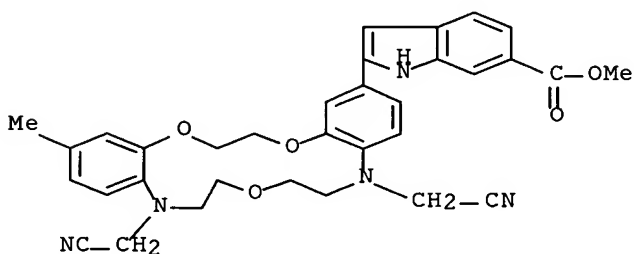
RN 481667-60-1 CAPLUS

CN Benzoic acid, 4-[2-[5,11-bis(cyanomethyl)-6,7,10,11,17,18-hexahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]ethenyl]-3-nitro-, methyl ester (9CI) (CA INDEX NAME)



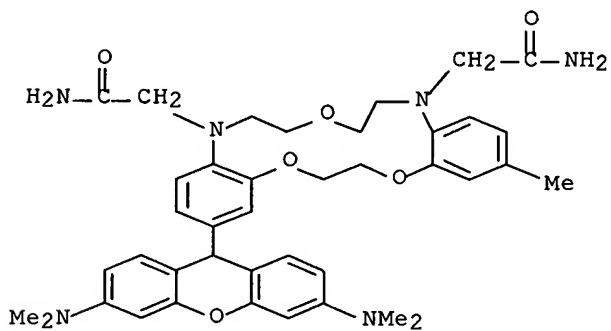
RN 481667-61-2 CAPLUS

CN 1H-Indole-6-carboxylic acid, 2-[5,11-bis(cyanomethyl)-6,7,10,11,17,18-hexahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-2-yl]-, methyl ester (9CI) (CA INDEX NAME)

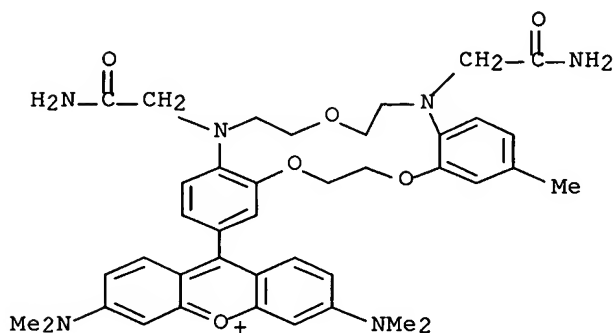


RN 481667-62-3 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetamide, 2-[3,6-bis(dimethylamino)-9H-xanthen-9-yl]-6,7,9,10,17,18-hexahydro-14-methyl- (9CI) (CA INDEX NAME)

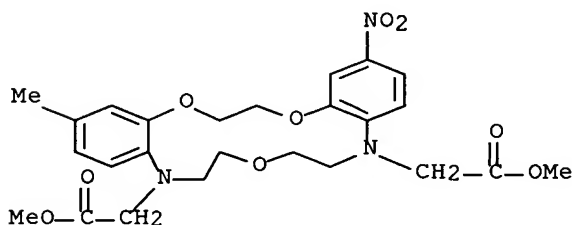


RN 481667-63-4 CAPLUS
 CN Xanthylium, 9-[5,11-bis(2-amino-2-oxoethyl)-6,7,10,11,17,18-hexahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)-, chloride (9CI) (CA INDEX NAME)

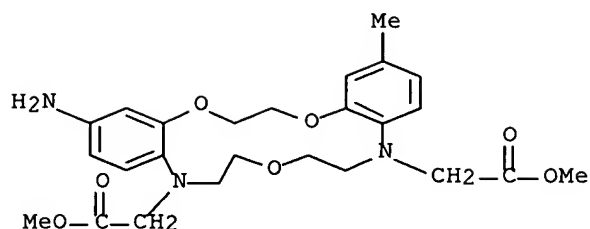


● Cl⁻

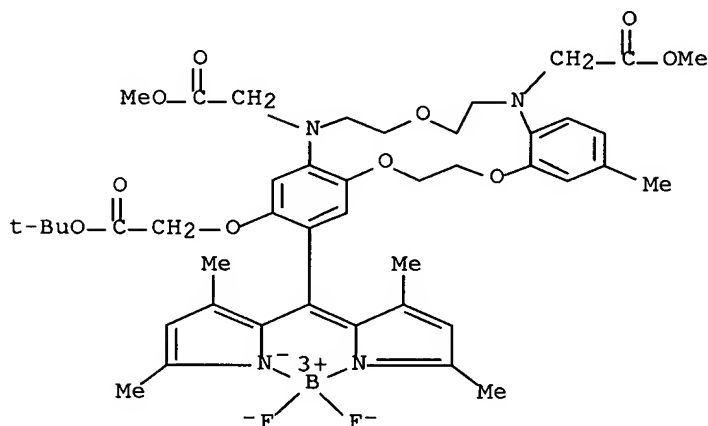
RN 481667-64-5 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic acid, 6,7,9,10,17,18-hexahydro-2-methyl-14-nitro-, dimethyl ester (9CI) (CA INDEX NAME)



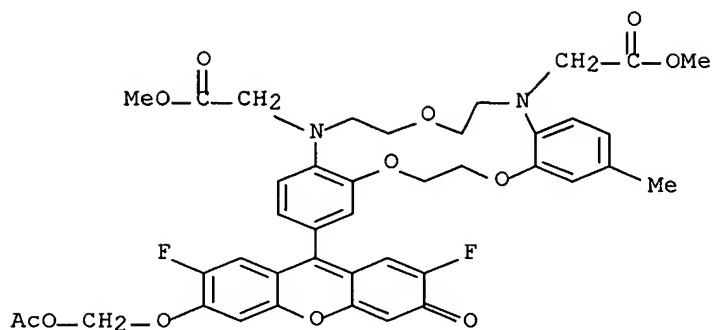
RN 481667-65-6 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic acid, 2-amino-6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



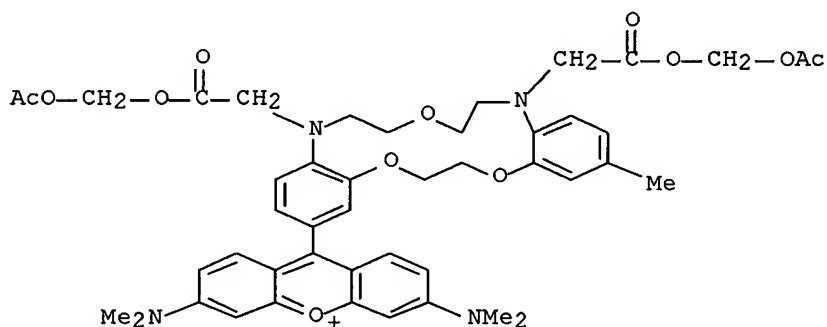
RN 481681-92-9 CAPLUS
 CN Boron, [dimethyl 3-[1-(1,1-dimethylethoxy)-2-oxoethoxy]-2-[(3,5-dimethyl-1H-pyrrol-2-yl-.kappa.N)(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-6,7,17,18-tetrahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11(10H)-diacetato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)



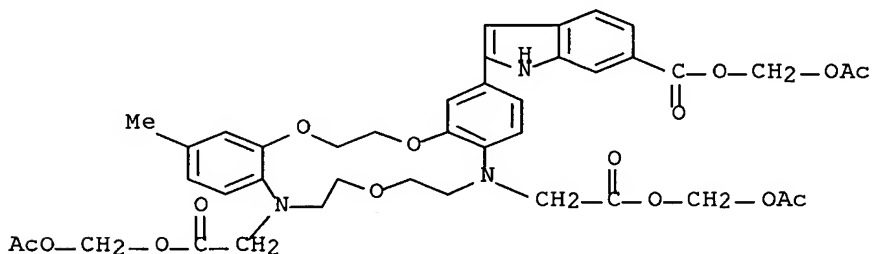
IT 481666-95-9P 481667-05-4P 481667-23-6P
 481667-28-1P 481667-35-0DP, reaction products with
 aminodextran 481667-35-0P 481667-40-7P
 481667-46-3P 481667-53-2P 481667-57-6P
 481667-59-8P 481667-66-7P 481681-94-1P
 RL: IMF (Industrial manufacture); PREP (Preparation)
 (prodn. of crown ether derivs. for use as fluorescent indicators with
 biomols.)
 RN 481666-95-9 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
 diacetic
 acid, 2-[6-[(acetyloxy)methoxy]-2,7-difluoro-3-oxo-3H-xanthen-9-yl]-
 6,7,9,10,17,18-hexahydro-14-methyl-, dimethyl ester (9CI) (CA INDEX
 NAME)



RN 481667-05-4 CAPLUS
 CN Xanthylum, 9-[5,11-bis[2-[(acetyloxy)methoxy]-2-oxoethyl]-
 6,7,10,11,17,18-
 hexahydro-14-methyl-5H,9H-
 dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentade
 cin-2-yl]-3,6-bis(dimethylamino)- (9CI) (CA INDEX NAME)

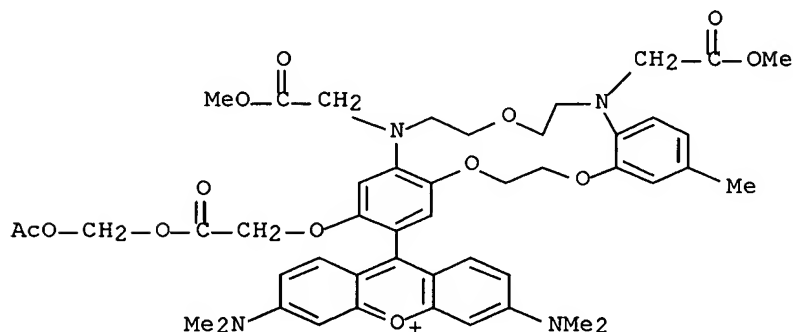


RN 481667-23-6 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
 diacetic
 acid, 2-[6-[[[(acetyloxy)methoxy]carbonyl]-1H-indol-2-yl]-6,7,9,10,17,18-
 hexahydro-14-methyl-, bis[(acetyloxy)methyl] ester (9CI) (CA INDEX
 NAME)



RN 481667-28-1 CAPLUS
 CN Xanthylum, 9-[3-[2-[(acetyloxy)methoxy]-2-oxoethoxy]-6,7,10,11,17,18-

hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)-, bromide (9CI) (CA INDEX NAME)



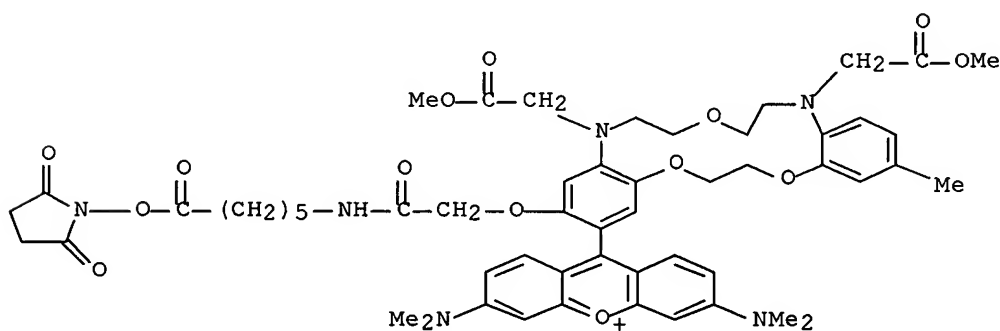
● Br⁻

RN 481667-35-0 CAPLUS

CN Xanthylium, 3,6-bis(dimethylamino)-9-[3-[2-[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-

5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-

dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]- (9CI) (CA INDEX NAME)

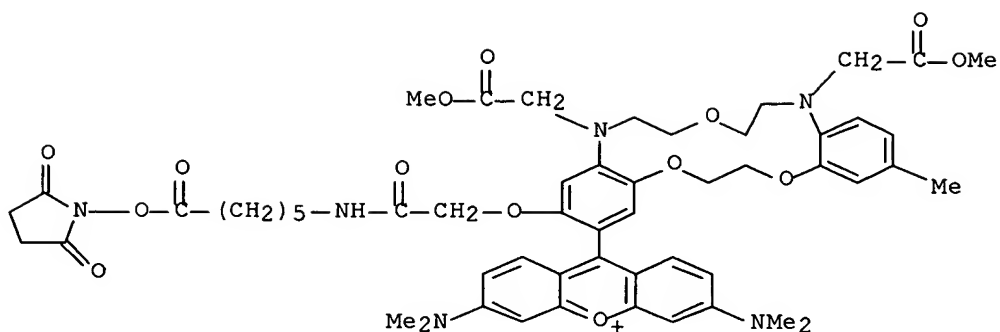


RN 481667-35-0 CAPLUS

CN Xanthylium, 3,6-bis(dimethylamino)-9-[3-[2-[[6-[(2,5-dioxo-1-pyrrolidinyl)oxy]-6-oxohexyl]amino]-2-oxoethoxy]-6,7,10,11,17,18-hexahydro-

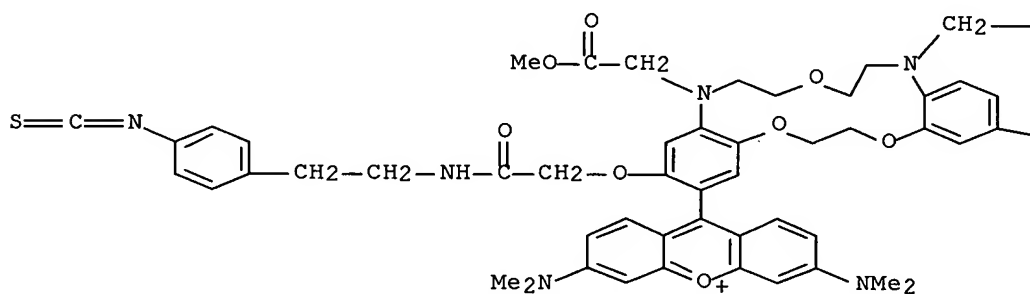
5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-

dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]- (9CI) (CA INDEX NAME)

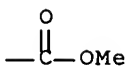


RN 481667-40-7 CAPLUS
 CN Xanthylum, 3,6-bis(dimethylamino)-9-[6,7,10,11,17,18-hexahydro-3-[2-
 [[2-(4-isothiocyanatophenyl)ethyl]amino]-2-oxoethoxy]-5,11-bis(2-methoxy-2-
 oxoethyl)-14-methyl-5H,9H-
 dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentade
 cin-2-yl]- (9CI) (CA INDEX NAME)

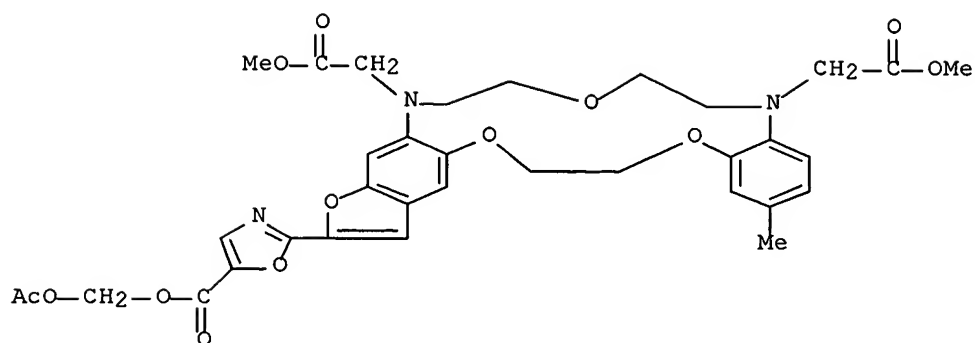
PAGE 1-A



PAGE 1-B

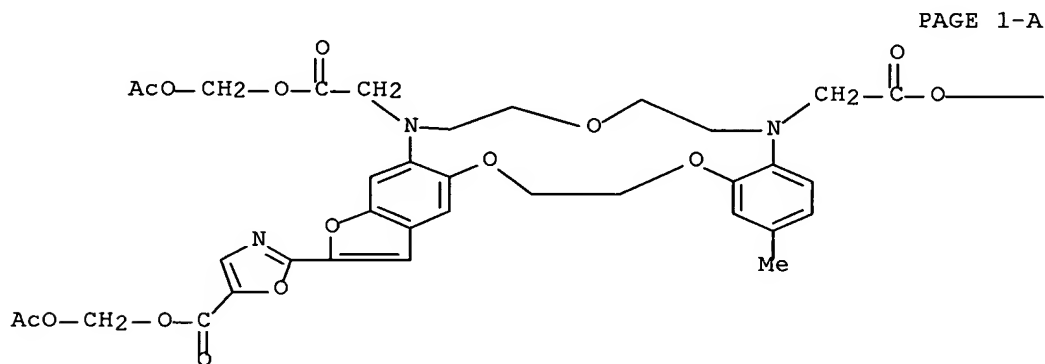


RN 481667-46-3 CAPLUS
 CN 5H,11H-Benzo[e]furo[2,3-p][1,4,10,7,13]benzotrioxadiazacyclopentadecine-
 5,11-diacetic acid, 14-[5-[[[acetyloxy)methoxy]carbonyl]-2-oxazolyl]-
 6,7,9,10,18,19-hexahydro-2-methyl-, dimethyl ester (9CI) (CA INDEX
 NAME)



RN 481667-53-2 CAPLUS

CN 5H,11H-Benzo[e]furo[2,3-p][1,4,10,7,13]benzotrioxadiazacyclopentadecine-5,11-diacetic acid, 14-[5-[(acetyloxy)methoxy]carbonyl]-2-oxazolyl]-6,7,9,10,18,19-hexahydro-2-methyl-, bis[(acetyloxy)methyl] ester (9CI)
(CA INDEX NAME)

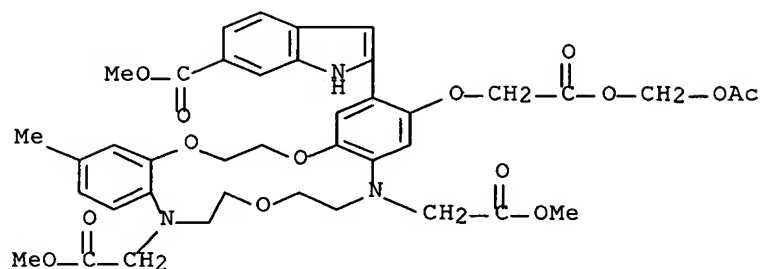


PAGE 1-B

—CH₂—OAc

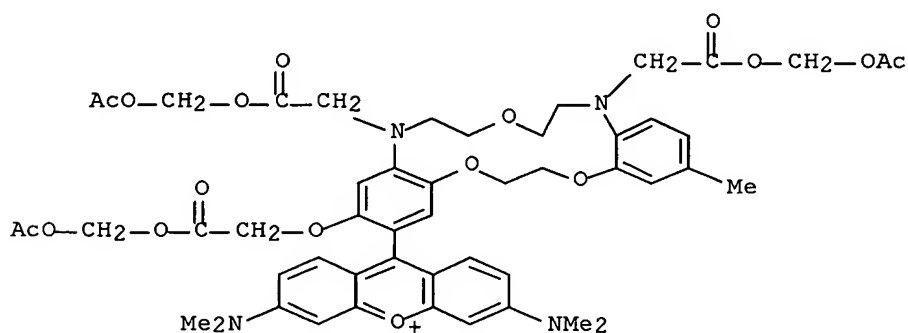
RN 481667-57-6 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic acid, 3-[2-[(acetyloxy)methoxy]-2-oxoethoxy]-6,7,9,10,17,18-hexahydro-2-[6-(methoxycarbonyl)-1H-indol-2-yl]-14-methyl-, dimethyl ester (9CI) (CA INDEX NAME)



RN 481667-59-8 CAPLUS

CN Xanthylium, 9-[3-[2-[(acetyloxy)methoxy]-2-oxoethoxy]-5,11-bis[2-[(acetyloxy)methoxy]-2-oxoethyl]-6,7,10,11,17,18-hexahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]-3,6-bis(dimethylamino)-, bromide (9CI) (CA INDEX NAME)

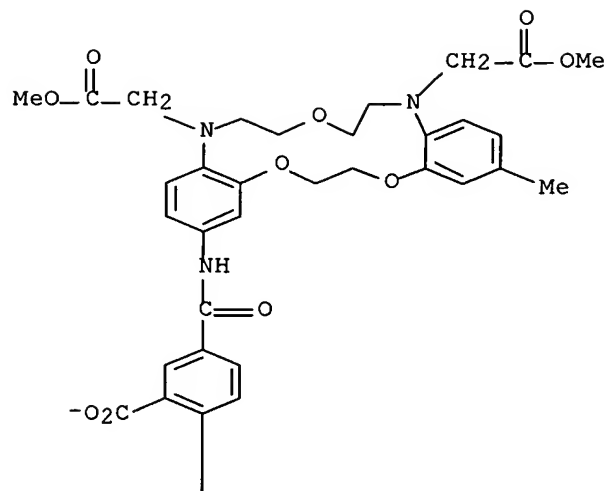


● Br⁻

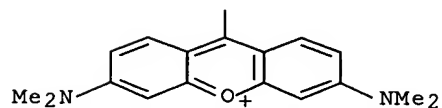
RN 481667-66-7 CAPLUS

CN Xanthylium, 9-[2-carboxy-4-[[[6,7,10,11,17,18-hexahydro-5,11-bis(2-methoxy-2-oxoethyl)-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecin-2-yl]amino]carbonyl]phenyl]-3,6-bis(dimethylamino)-, inner salt (9CI) (CA INDEX NAME)

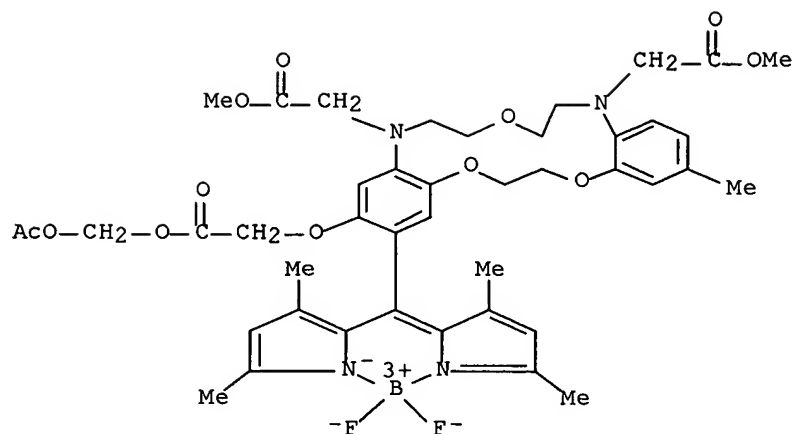
PAGE 1-A



PAGE 2-A



RN 481681-94-1 CAPLUS
 CN Boron, [dimethyl 3-[2-[(acetyloxy)methoxy]-2-oxoethoxy]-2-[(3,5-dimethyl-1H-pyrrol-2-yl-.kappa.N)(3,5-dimethyl-2H-pyrrol-2-ylidene-.kappa.N)methyl]-6,7,17,18-tetrahydro-14-methyl-5H,9H-dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11(10H)-diacetato]difluoro-, (T-4)- (9CI) (CA INDEX NAME)



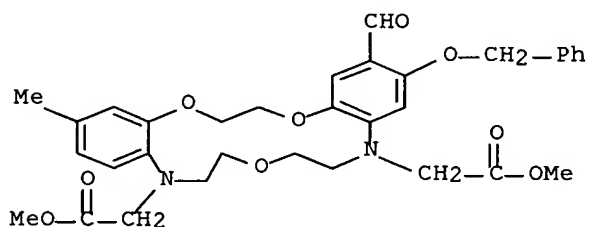
IT 481666-76-6

RL: RCT (Reactant); RACT (Reactant or reagent)
(starting material; prodn. of crown ether derivs. for use as
fluorescent indicators with biomols.)

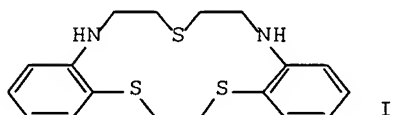
RN 481666-76-6 CAPLUS

CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-
diacetic

acid, 2-formyl-6,7,9,10,17,18-hexahydro-14-methyl-3-(phenylmethoxy)-,
dimethyl ester (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1988:447419 CAPLUS
 DN 109:47419
 TI Selective extraction and determination of silver by using nitrogen-,
 oxygen- and sulfur-containing macrocyclic extractants
 AU Poddubnykh, L. P.; Zolotov, Yu. A.; Kuz'min, N. M.; Dmitrienko, S. G.
 CS Moscow State Univ., Moscow, USSR
 SO Zhurnal Analiticheskoi Khimii (1988), 43(2), 255-60
 CODEN: ZAKHA8; ISSN: 0044-4502
 DT Journal
 LA Russian
 GI



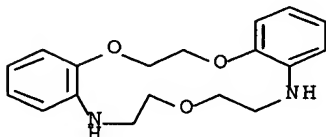
AB Eight macrocyclic extractants with 15-member rings contg. 5 hetero atoms
 and various counter anions were tested as reagents for Ag. The best
 macrocycle was I. Ag was detd. by extn. of (AgH₂L)+X⁻ (H₂L = I; X =
 dipicrylamine or picrate) from pH 6-9 or 5-8 solns., resp., into
 1,2-C₂H₄Cl₂ or CHCl₃ and measuring the absorbance at 380 and 360 nm,
 resp. The molar absorptivities are 2.5 .times. 10⁴ and 1.4 .times. 10⁴,
 resp. The logarithm of the partition coeff. is a linear function of
 various solvent and soln. parameters, such as Hildebrand's soly.,
 dielec. const., spectral parameter, and solvent effect. The detection
 limits are 0.08 and 0.1 .mu.g/mL, with dipicrylamine and picrate,
 resp. The methods were used for detg. Ag in a water anal. std. and
 spent photog. fixing solns.

IT **96656-75-6**

RL: ANST (Analytical study)
 (in extn. of silver)

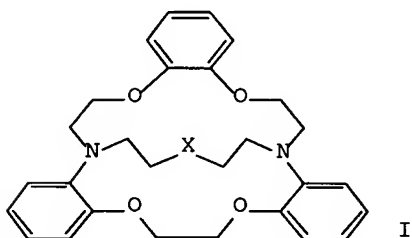
RN 96656-75-6 CAPLUS

CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine,
 6,7,10,11,17,18-hexahydro- (9CI) (CA INDEX NAME)



L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1987:594570 CAPLUS
 DN 107:194570
 TI [2,2,1]Cryptands that selectively bind sodium, their preparation, and their use in determination of cytoplasmic sodium concentration
 IN Smith, Gerald Arthur
 PA Amersham International PLC, UK
 SO Eur. Pat. Appl., 13 pp.
 CODEN: EPXXDW
 DT Patent
 LA English
 FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	EP 223613	A2	19870527	EP 1986-309094	19861120
	EP 223613	A3	19881019		
	R: DE, FR, GB				
	US 4843158	A	19890627	US 1986-932643	19861119
	JP 62129283	A2	19870611	JP 1986-279541	19861122
PRAI	GB 1985-28804		19851122		
GI					



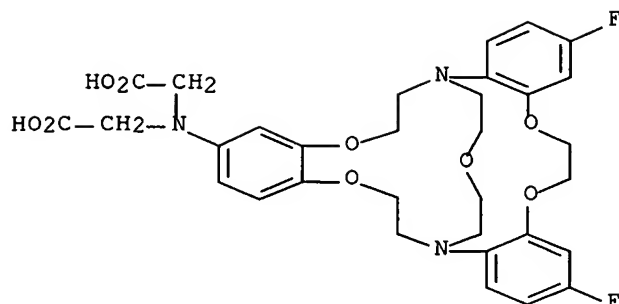
AB Cryptands I (X = O, PhN) selectively bind Na⁺ in the presence of K⁺ and can be used as probes to det. cytoplasmic Na⁺. The arom. rings may be substituted, e.g. with a spectroscopic reporter group or a group which promotes uptake and retention of I by cells, and may form parts of a fused arom. ring system. Pig lymphocytes suspended in RPM1 medium were treated with [1-fluoro-3,4-benzo]-14,15-[1-bis(carboxymethyl)amino-2-acetyl-4,5-benzo]-21-[3-bis(carboxymethyl)aminophenyl]-4,7,13,16-tetraoxa-1,10,21-triazabicyclo[8.8.5]tricosane tetra(acetoxymethyl) ester (II) in DMSO and incubated at 37.degree. for 1 h. The cells were isolated, suspended in medium, and the signal was measured. The ¹⁹F chem. shift was 5.99 ppm downfield from that of a std., indicating a Na⁺ concn. of about 13 mM. The multistep prepn. of II from 1,2-bis(2-amino-5-fluorophenoxy)ethane and diglycolyl chloride is described.

IT **107140-97-6P 107163-39-3P 107163-40-6P**

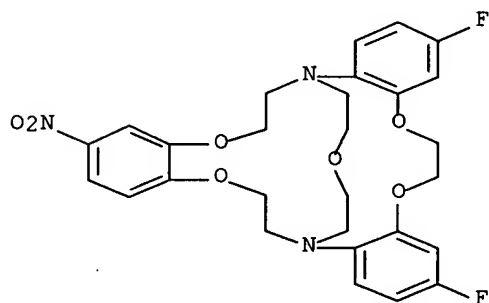
RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, as reagent for sodium detn. in cytoplasm)

RN 107140-97-6 CAPLUS

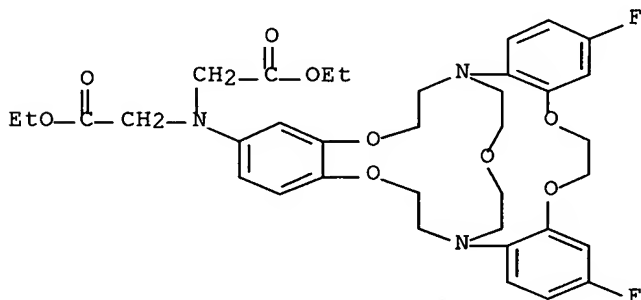
CN Glycine, N-(carboxymethyl)-N-(3,10-difluoro-6,7,14,15,22,23-hexahydro-13,24-(ethanoxyethano)-13H,24H-tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecin-18-yl)- (9CI)
 (CA INDEX NAME)



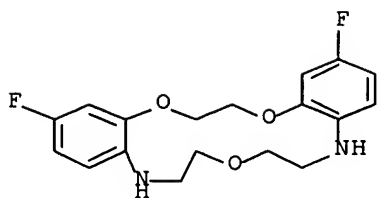
RN 107163-39-3 CAPLUS
 CN 13,24-(Ethanoxyethano)-13H,24H-
 tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecine, 3,10-
 difluoro-6,7,14,15,22,23-hexahydro-18-nitro- (9CI) (CA INDEX NAME)



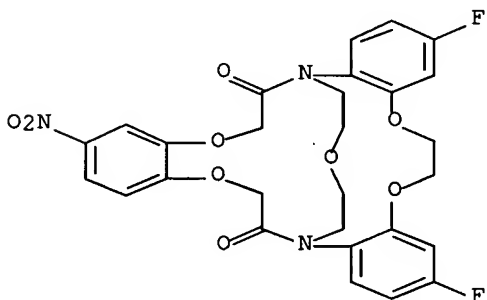
RN 107163-40-6 CAPLUS
 CN Glycine, N-(3,10-difluoro-6,7,14,15,22,23-hexahydro-13,24-
 (ethanoxyethano)-
 13H,24H-tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecin-18-
 yl)-
 N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)



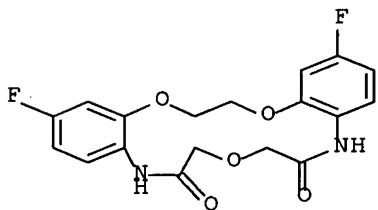
IT 107140-88-5P 107140-95-4P 107163-38-2P
 RL: SPN (Synthetic preparation); PREP (Preparation)
 (prepn. of, in cryptand synthesis)
 RN 107140-88-5 CAPLUS
 CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine,
 2,14-difluoro-6,7,10,11,17,18-hexahydro- (9CI) (CA INDEX NAME)



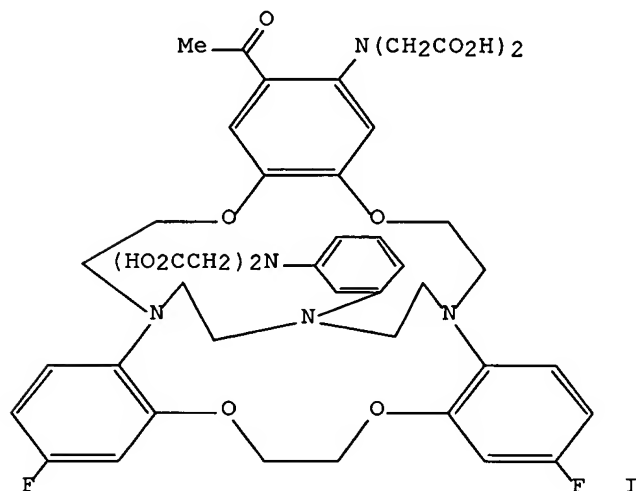
RN 107140-95-4 CAPLUS
 CN 13,24-(Ethanoxyethano)-13H,24H-
 tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiaz
 acyclooctadecine-14,23(15H,22H)-dione, 3,10-difluoro-6,7-dihydro-18-
 nitro-
 (9CI) (CA INDEX NAME)



RN 107163-38-2 CAPLUS
 CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-6,10(7H,11H)-
 dione, 2,14-difluoro-17,18-dihydro- (9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1987:115945 CAPLUS
 DN 106:115945
 TI Design of an indicator of intracellular free sodium concentration using
 fluorine-19 NMR
 AU Smith, Gerry A.; Morris, Peter G.; Hesketh, T. Robin; Metcalfe, James C.
 CS Dep. Biochem., Cambridge, CB2 1QW, UK
 SO Biochimica et Biophysica Acta (1986), 889(1), 72-83
 CODEN: BBACAQ; ISSN: 0006-3002
 DT Journal
 LA English
 GI



AB The development is described of a Na chelator with appropriate
 properties
 for an indicator of intracellular free Na concn. ([Na]_i). The new
 indicator, FCryp-1 (I), is a tribenzo deriv. of the parent (2:2:1)
 cryptand structure, incorporating the same F-substituted dibenzo 19F-NMR
 reporter group as the free [Ca²⁺] indicator, 5FBAPTA. I has appropriate
 affinity for Na⁺ (K_{Na} = 101.3 M⁻¹) and selectivity over other
 intracellular cations (K_K; K_{Ca}; K_{Mg} < 10⁻¹ M⁻¹) for a [Na]_i indicator.
 There is a 19F-NMR chem. shift of 2.00 ppm between free I and the Na-I
 complex, which provides a direct read out of free [Na]. I carries 4
 carboxylate groups to confer aq. soly., which can be esterified with
 acetoxymethyl groups to render the indicator membrane permeant. Expts.

on

pig lymphocytes loaded with I gave an indicated [Na]_i of 13.8 mM. The I
 structure can also be readily modified to provide fluorescent [Na]_i
 indicators.

IT 107140-96-5P

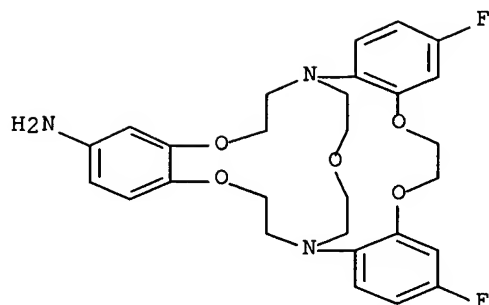
RL: PREP (Preparation)
 (prepn. and acetate addn. to amino group of)

RN 107140-96-5 CAPLUS

CN 13,24-(Ethanoxymethano)-13H,24H-

tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiaz

acyclooctadecin-18-amine, 3,10-difluoro-6,7,14,15,22,23-hexahydro- (9CI)
 (CA INDEX NAME)



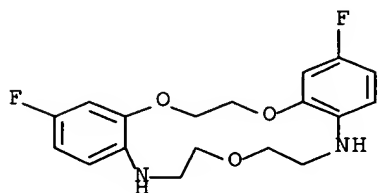
IT 107140-88-5P

RL: PREP (Preparation)

(prepn. and acetates addn. to amino groups of or ring fusion with)

RN 107140-88-5 CAPLUS

CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine,
2,14-difluoro-6,7,10,11,17,18-hexahydro- (9CI) (CA INDEX NAME)



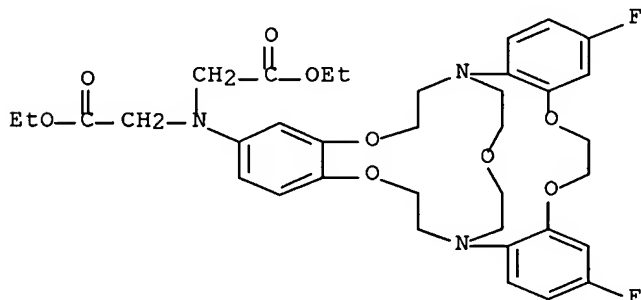
IT 107163-40-6P

RL: PRP (Properties); PREP (Preparation)

(prepn. and acetylation of)

RN 107163-40-6 CAPLUS

CN Glycine, N-(3,10-difluoro-6,7,14,15,22,23-hexahydro-13,24-
(ethanoxyethano)-
13H,24H-tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecin-18-
yl)-
N-(2-ethoxy-2-oxoethyl)-, ethyl ester (9CI) (CA INDEX NAME)

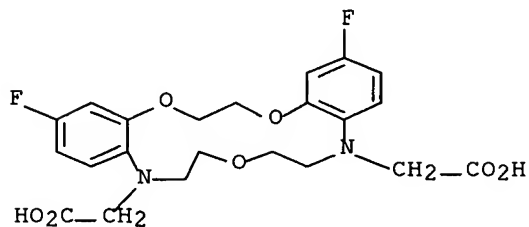


IT 107140-93-2P 107140-97-6P

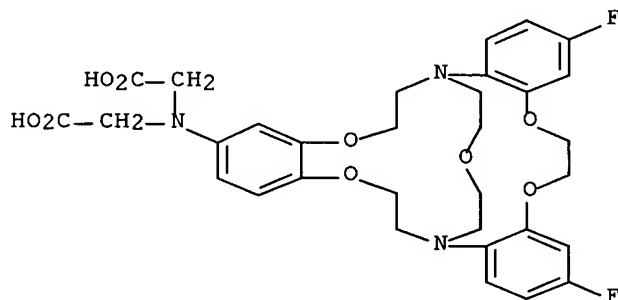
RL: PREP (Preparation)

(prepn. and cation binding consts. of)

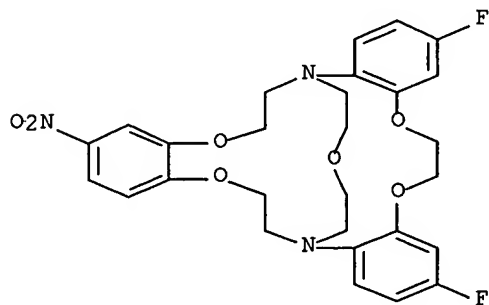
RN 107140-93-2 CAPLUS
 CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-diacetic
 acid, 2,14-difluoro-6,7,9,10,17,18-hexahydro- (9CI) (CA INDEX NAME)



RN 107140-97-6 CAPLUS
 CN Glycine, N-(carboxymethyl)-N-(3,10-difluoro-6,7,14,15,22,23-hexahydro-13,24-(ethanoxyethano)-13H,24H-tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecin-18-yl)- (9CI) (CA INDEX NAME)



IT 107163-39-3P
 RL: PREP (Preparation)
 (prepn. and hydrogenation to amine)
 RN 107163-39-3 CAPLUS
 CN 13,24-(Ethanoxyethano)-13H,24H-tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecine, 3,10-difluoro-6,7,14,15,22,23-hexahydro-18-nitro- (9CI)
 (CA INDEX NAME)

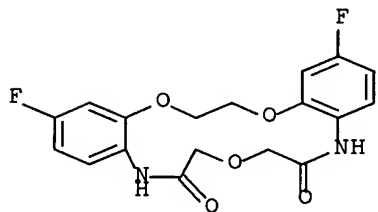


IT 107163-38-2P

RL: PREP (Preparation)
(prepn. and redn. to diamine)

RN 107163-38-2 CAPLUS

CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-6,10(7H,11H)-dione, 2,14-difluoro-17,18-dihydro- (9CI) (CA INDEX NAME)

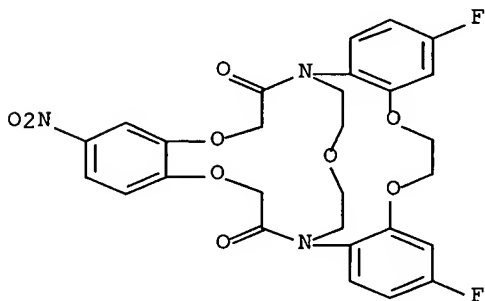


IT 107140-95-4P

RL: PREP (Preparation) (prepn. and redn. to nitrodiamine)

RN 107140-95-4 CAPLUS

CN 13,24-(Ethanoxymethano)-13H,24H-tribenzo[b,h,n][1,4,10,13,7,16]tetraoxadiazacyclooctadecine-14,23(15H,22H)-dione, 3,10-difluoro-6,7-dihydro-18-nitro- (9CI) (CA INDEX NAME)

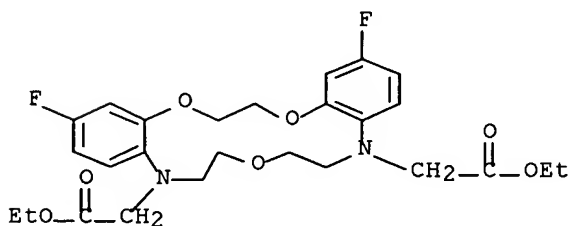


IT 107140-89-6P

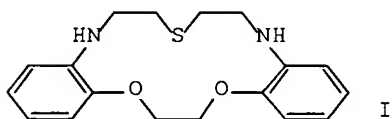
RL: PREP (Preparation) (prepn. of)

RN 107140-89-6 CAPLUS

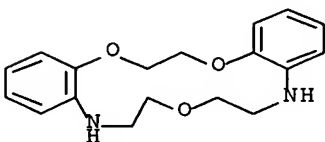
CN 5H,11H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-5,11-Diacetic acid, 2,14-difluoro-6,7,9,10,17,18-hexahydro-, diethyl ester (9CI) (CA INDEX NAME)



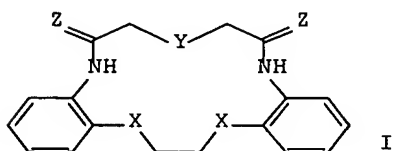
L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1986:564013 CAPLUS
 DN 105:164013
 TI Sulfur-containing analogs of dibenzo-15-crown-5 as reagents for selective extraction of mercury
 AU Zolotov, Yu. A.; Poddubnykh, L. P.; Dmitrienko, S. G.; Kuz'min, N. M.; Formanovskii, A. A.
 CS M. V. Lomonosov Moscow State Univ., Moscow, USSR
 SO Zhurnal Analiticheskoi Khimii (1986), 41(6), 1046-50
 CODEN: ZAKHA8; ISSN: 0044-4502
 DT Journal
 LA Russian
 GI



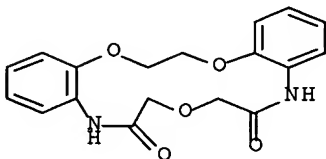
AB Dibenzo-15-crown-5 compds. (HL) contg. N, O, and S were tested as extractants for metals in the absence and presence of counter ions, e.g. sulfophthalein dye anions (A). Extn. consts. were detd. for the 1:1:1 Hg(II) complex ion pairs HgLA in CHCl₃-H₂O systems. A selective method was developed for detg. Hg, involving extn. at pH 5 by using crown compd. I as ligand and picrate as counter ion, reacting the ext. with dithizone, and measuring the absorbance at 490 nm. The molar absorptivity of the dithizone complex is 6.80.times.10⁴. Beer's law is obeyed for 0.1-3 .mu.g Hg/mL. The detection limit (3s) is 0.04 .mu.g/mL. The method was used for anal. of natural waters with low salt content.
 IT **96656-75-6**
 RL: ANST (Analytical study)
 (extn. and use of, in extn. of mercury)
 RN 96656-75-6 CAPLUS
 CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine, 6,7,10,11,17,18-hexahydro- (9CI) (CA INDEX NAME)



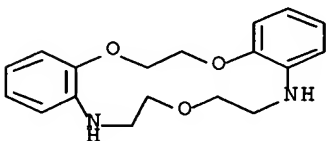
L4 ANSWER 6 OF 6 CAPLUS COPYRIGHT 2003 ACS on STN
 AN 1985:220853 CAPLUS
 DN 102:220853
 TI Synthesis of macroheterocycles that are analogs of dibenzo-crown compounds. 1. 15-Membered oxathiadiazines
 AU Formanovskii, A. A.; Murakhovskaya, A. S.
 CS Inst. Geokhim. Anal. Khim. im. Vernadskogo, Moscow, 117975, USSR
 SO Khimiya Geterotsiklicheskikh Soedinenii (1985), (2), 267-71
 CODEN: KGSSAQ; ISSN: 0453-8234
 DT Journal
 LA Russian
 OS CASREACT 102:220853
 GI



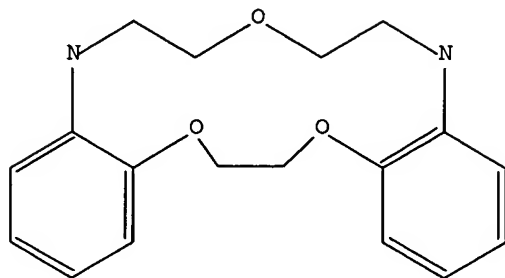
AB Macrocyclic diamides I (X = O, S, Y = CH₂, O, S, Z = O) were prepd. in 50-90% yields by cyclocondensation of o-H₂NC₆H₄XCH₂CH₂XC₆H₄NH₂-o with Y(CH₂COCl)₂ in C₆H₆ contg. pyridine 6 h at 75.degree.. Redn. of I by NaBH₄-BF₃.Et₂O 2 h in THF gave 75-95% I (Z = H₂).
 IT **96656-69-8P 96656-75-6P**
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent) (prepn. and redn. of)
 RN 96656-69-8 CAPLUS
 CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine-6,10(7H,11H)-dione, 17,18-dihydro- (9CI) (CA INDEX NAME)



RN 96656-75-6 CAPLUS
 CN 5H,9H-Dibenzo[e,n][1,4,10,7,13]trioxadiazacyclopentadecine, 6,7,10,11,17,18-hexahydro- (9CI) (CA INDEX NAME)



=> d l1; d his; log y
L1 HAS NO ANSWERS
L1 STR



G1 O, S, N

Structure attributes must be viewed using STN Express query preparation.

(FILE 'HOME' ENTERED AT 17:35:19 ON 15 AUG 2003)

FILE 'REGISTRY' ENTERED AT 17:35:29 ON 15 AUG 2003

L1 STRUCTURE UPLOADED

L2 3 S L1

L3 72 S L1 FUL

FILE 'CAPLUS' ENTERED AT 17:35:53 ON 15 AUG 2003

L4 6 S L3

COST IN U.S. DOLLARS	SINCE FILE	TOTAL
	ENTRY	SESSION
FULL ESTIMATED COST	27.63	175.99
DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE	TOTAL
	ENTRY	SESSION
CA SUBSCRIBER PRICE	-3.91	-3.91

STN INTERNATIONAL LOGOFF AT 17:36:35 ON 15 AUG 2003